

# **Electronics Technology**

## **INTRODUCTION:**

This publication constitutes a Broad Agency Announcement (BAA) as contemplated in Federal Acquisition Regulation (FAR) 6.102(d)(2), the Department of Defense Grants and Agreements Regulations (DoDGARS) 22.315(a), and DoD's Other Transaction Guide for Prototypes Projects, USD(AT&L), OT Guide, Jan 2001. A formal Request for Proposals (RFP), other solicitation, or additional information regarding this announcement will not be issued.

The Office of Naval Research (ONR) will not issue paper copies of this announcement. The ONR reserves the right to fund all, some or none of the proposals received under this BAA. ONR provides no funding for direct reimbursement of proposal development costs. Technical and cost proposals (or any other material) submitted in response to this BAA will not be returned. It is the policy of ONR to treat all proposals as sensitive competitive information and to disclose their contents only for the purposes of evaluation.

#### I GENERAL INFORMATION:

SPECIAL NOTICE: All Grant Applications submitted under this BAA shall be submitted via the Grants.Gov "APPLY" function. No other form of paper or electronic submission will be accepted unless the prospective grantee organization applies for and receives a waiver in accordance with Section IV, Application and Submission Information, Paragraph 5 entitled 'Submission of Grant Proposals to Grants.gov' below.

All attachments to grant applications submitted through Grants.Gov must be in Adobe Portable Document Format. Proposals with attachments submitted in word processing, spreadsheet, or any format other than Adobe Portable Document Format will not be considered for award.

Be advised that Grants.gov applicants have been experiencing system slowness issues which may impact the time required to submit proposals. It is recommended that any soft-copy proposals be uploaded several days before the deadline established in the solicitation so that it will not be received late and be ineligible for award consideration.

- 1. Agency Name Office of Naval Research
- 2. Research Opportunity Title Electronics Technology
- 3. Program Name Electronics Discovery and Invention (D&I)
- 4. Research Opportunity Number 09-020
- 5. Response Date -

White Papers: 4/10/2009 Full Proposals: 6/26/2009

6. Research Opportunity Description -

The Office of Naval Research (ONR) is interested in receiving proposals for efforts that aim to develop and demonstrate science and technology for the next generation (2010 - 2013) electronics devices under the following focus area:

Wideband, Low Noise, Interference-Tolerant Receiver Component and Chain Development for Dense Signal Environments

### Background:

- > 10

Future Navy / Department of Defense (DoD)/Radio Frequency (RF) / microwave systems will require optimal, unimpeded use of the frequency spectrum in a broadband, dense electromagnetic environment. The vision for the Navy is to develop broadband multiple simultaneous satellite communications and Electronic Warfare (EW) apertures and receivers that can operate in a multifunction capacity. In this context, a set of high level objectives are shown in Table 1

Table-1. High Level, Long Term Technology Objectives

- □ 2+ octave instantaneous bandwidth
   Approximately 6 Giga Hertz (GHz) 24 GHz
   □ Ultra-low overall noise figure
   < 1 decibel (dB)</li>
   □ Ultra-high instantaneous spur-free dynamic range
   Improvement by 30 dB relative to current art
   □ Fast scanning and/or agility
   1 µs
   □ Multiple simultaneous beams
- Current Art Component Technology Deficiencies:

A receiver noise figure is generally set by the losses on the front end and the low noise amplifier. Current technologies developed for Commercial Off the Shelf (COTS) receiving systems are generally narrow band and do not address survivability and operation in a dense ElectroMagnetic (EM) environment. COTS low noise amplifiers having noise figures < 1 dB are readily available and generally have good in band intermodulation distortion performance, however typically operate over less than 5% bandwidth. Narrowband receiver front ends consisting of an antenna element, a filter, and a low noise amplifier are able to achieve low noise performance because they are tuned and can exploit properties of high Q resonance phenomena. Broadband receiver front ends, on the other hand, achieve worse noise figure performance (typically 2-3 dB) due to factors such as losses associated with the wide band matching and coupling networks . Additionally, they can be more susceptible to EM interference and in band intermodulation distortion. It is possible to place an analog pre-processor (e.g., tunable filter &/or frequency multiplexers) on a receiver front end prior to the Low Noise Amplifier (LNA) and any mixers to mitigate EM interference. However, doing so degrades noise performance due to increased matching problems and losses unless these terms are somehow aggressively mitigated, e.g, by the use of cryocooling. The dynamic range of receiver front ends is associated with the compression point of active components, such as LNAs, mixers, infrared (IIF) and Analog to Digital (ADC) stages. The intermodulation distortion and the compression point of conventional LNAs can be improved, but at the expense of power consumption. The radiating element conventionally performs a match between free space (377 ohms) and a 50 ohm transmission line, thus providing a signal which further must be coupled to an active transistor or device typically having impedances on the order of ohms. These matching and coupling network interactions tend to contribute to significant losses which degrade overall system noise figure and performance of a receiver front end.

In summary, the implications of current art deficiencies are that the tradeoffs between noise performance, dynamic range, and bandwidth of receiver apertures usually require the aperture to grow in size beyond that of a single narrow band counterpart aperture.

Technology Needs Addressed Within This Announcement:

ONR is seeking innovative and disruptive electronics technology and component technology approaches that address the generally unsolved problem of how one can couple from free space to a low noise, large dynamic range signal over a broad bandwidth of 4:1. Technology and component approaches must address the long term system objectives provided in Table 1 above.

Within this focus area proposals are sought to improve the noise performance and interference tolerance of wideband receiver components and chains designed for use in dense signal environments. Efforts may be included to define new chain architectures. Offerors should describe: both the specific component(s) they will develop and how the interactions within the full chain will be estimated or demonstrated; how the approach chosen will achieve a system noise figure < 1dB when no interference occurs; and how the approach chosen will substantially reduce both harmonic and Intermodulation Distortion (IMD) production when multiple large signals are simultaneously present at 50 dB larger amplitude than the small signals of interest. The components and chains developed must be capable of being extended to complete multifunction systems that support the radar, communications, and electronic warfare functions. Analog and digital approaches are acceptable. Offerors must clearly indicate the assumptions made in terms of frequencies, bandwidths, and maximum number of signals that can be simultaneously received. Offerors must consider interactions of the proposed component technologies with respect to bandwidth, dynamic range and noise figure. Offerors must also discuss the impact of the component technologies on both survivability and operation in a dense EM environment. Teaming amongst multiple performers is highly encouraged.

ONR is also receptive to game-changing concepts in electronics technology areas that are outside the designated focus area that can significantly impact the performance of Navy and Marine Corps electronic systems such as (but not limited to) the following:

# **RF Solid State Power Amplifiers**

Provide for the development of solid state power amplifier technology for Navy all-weather radar, surveillance, reconnaissance, electronic attack, communications, and asymmetric warfare systems. The technology developed cannot, for the most part, be obtained through COTS products as a result of the simultaneous requirements placed on power, frequency, linearity, bandwidth, weight, and size. Topics of interest include but are not restricted to the development of solid state devices and circuits using Group III-V material technologies to realize high power added efficiency, high-power amplifiers

### RF Supporting Technologies:

Provide for the radiation, reception, signal control and processing of microwave (MW) and millimeter wave (MMW) power for Navy all-weather radar, surveillance, reconnaissance, electronic attack (EA), communications, and asymmetric warfare systems. The technology developed cannot be obtained through COTS products as a result of the requirements placed on power, frequency, linearity, bandwidth, weight, and size. Innovative solutions are sought in the areas of band pass and extreme spur-free dynamic range ADCs; ultra high-efficiency power digital-to-analog converters (Power-DACs) where distributed and /or noise shaping techniques may be considered; extremely high speed logic devices; compact isolators; frequency synthesizers; channelizers; circulators; electrically small antennas; and high power filters.

This BAA will only address funding opportunities for the Fiscal Year (FY) 2010 Electronics Discovery and Invention (D&I) Program.

Work funded under a BAA may include basic research, applied research and some advanced technology development (ATD). With regard to any restrictions on the conduct or outcome of work funded under this BAA, ONR will follow the guidance on and definition of "contracted fundamental research" as provided in the Under Secretary of Defense (Acquisition, Technology and Logistics) Memorandum of 26 June 2008. As defined therein, the definition of "contracted fundamental research", in a DoD contractual context, includes [research performed under] grants and contracts that are (a) funded by Research, Development, Test, and Evaluation Budget Activity 1 (Basic Research), whether performed by universities or industry or (b) funded by Budget Activity 2 (Applied Research) and performed on campus at a university or by industry. ATD is funded through Budget Activity 3. In conformance with the USD(AT&L) guidance and National Security Decision Directive 189, ONR will

place no restriction on the conduct or reporting of unclassified fundamental research, except as otherwise required by statute, regulation or Executive Order. Normally, fundamental research is awarded under grants with universities and under contracts with industry. ATD is normally awarded under contracts and may require restrictions during the conduct of the research and DoD pre-publication review of research results due to subject matter sensitivity. As regards to the present BAA, the Research and Development efforts to be funded will consist of applied research. The funds available to support awards are Budget Activity 6.2.

## 7. Point(s) of Contact -

Questions of a technical nature should be submitted to:

**Primary Technical Point of Contact** 

Dr. Ingham A. Mack
Electronics, Sensors, and Networks Research Division
Code 312
Office of Naval Research
875 North Randolph Street - Suite 909
Arlington, VA 22203-1995
E-mail Address: macki@onr.navy.mil

Secondary Technical Point of Contact

Dr. Daniel S. Purdy
Electronics, Sensors, and Networks Research Division
Code 312
Office of Naval Research
875 North Randolph Street - Suite 909
Arlington, VA 22203-1995
E-mail Address: dan.purdy@onr.navy.mil

Questions of a business nature should be submitted to:

**Primary Point of Contact** 

Lynn Christian Code 0251 875 North Randolph Street - Suite 1425 Arlington, VA 22203-1995 email: lynn.christian@navy.mil

Secondary Point of Contact

Vera M. Carroll Code 0251 875 North Randolph Street - Suite 1425 Arlington, VA 22203-1995 Email: vera.carroll@navy.mil

Questions of a security nature should be submitted to:

Derrick Shack Information Security Specialist Office of Naval Research Security Department, Code 43 One Liberty Center 875 N. Randolph Street Arlington, VA 22203-1995

Email Address: derrick.shack@navy.mil

Note: All UNCLASSIFIED communications shall be submitted via e-mail. All questions of an UNCLASSIFIED nature to the Technical Point of Contact (POC) or Security POC shall be sent via e-mail with a copy to the designated Business POC. Questions submitted within 2 weeks prior to a deadline may or may not receive a response.

Any CLASSIFIED questions shall be handled through the ONR Security POC. Specifically, any entity wanting to ask a CLASSIFIED question shall send an email to the ONR Security POC with copy to both the Technical POC and the Business POC stating that the entity would like to ask a CLASSIFIED question. DO NOT EMAIL ANY CLASSIFIED QUESTIONS. The Security POC will contact the entity and arrange for the CLASSIFED question to be asked through a secure method of communication.

### 8. Instrument Type(s) - Contracts and Grants

Awards may take the form of Contracts and Grants as appropriate.

### 9. Catalog of Federal Domestic Assistance (CFDA) Numbers -

12.300

### 10. Catalog of Federal Domestic Assistance (CFDA) Titles -

Basic & Applied Scientific Research

### 11. Other Information -

This announcement is restricted to applied research. Contracts and grants made under this BAA are for scientific study and experimentation directed towards advancing the state of the art and increasing knowledge or understanding.

THIS ANNOUNCEMENT IS NOT FOR THE ACQUISITION OF TECHNICAL, ENGINEERING AND OTHER TYPES OF SUPPORT SERVICES.

### II. AWARD INFORMATION

The amount and period of performance of each selected proposal will vary depending on the research area and the technical approach to be pursued by the selected offeror.

ONR plans to make three (3) to four (4) awards that represent the best value to the Government in accordance with the evaluation criteria. ONR is seeking participants for this program that are capable of supporting the goals described in this announcement. Offerors have the opportunity to be creative in the selection of the technical and management processes and approaches to address the areas of interest described above.

The period of performance of the awards typically ranges from twelve months to three years. ONR anticipates a budget of approximately \$1,200,000 in Fiscal Year (FY) 2010 for the D&I Program with no funding under this BAA anticipated in FY2010 for the exploitation and deployment (E&D) or innovative naval prototype (INP) Programs. ONR plans to fund individual awards of \$200,000 to \$450,000 per year using Applied Research money. However, lower and higher cost proposals will be considered. The average funding level of past awards was approximately \$200,000 - \$500,000 per year.

ONR has funded related technology development under numerous programs. If Offerors are enhancing work performed under other ONR or DoD projects, they must clearly identify the point of departure and

what existing work will be brought forward and what new work will be performed under this BAA.

\*For the past two years Congress has placed limits on the percentage of facilities and administrative (F&A) costs that can be paid by the government using basic research (6.1) funds. Currently F&A costs paid under contracts and grants for the performance of basic research my not exceed 35 percent. It is unknown at present whether a similar indirect cost restriction will apply to 6.1 funds in FY 2010 or thereafter.

\*Estimated Total Amount of Funding Available (\$K):

FY2010	FY2011	FY2012	FY2013	FY	Total
\$1200	\$1500	\$1500	\$500	\$0	\$4700

## **III. ELIGIBILITY INFORMATION**

All responsible sources from academia and industry may submit proposals under this BAA. Historically Black Colleges and Universities (HBCUs) and Minority Institutions (MIs) are encouraged to submit proposals and join others in submitting proposals. However, no portion of this BAA will be set aside for HBCU and MI participation.

Federally Funded Research & Development Centers (FFRDCs), including Department of Energy National Laboratories, are not eligible to receive awards under this BAA. However, teaming arrangements between FFRDCs and eligible principal bidders are allowed so long as they are permitted under the sponsoring agreement between the Government and the specific FFRDC.

Navy laboratories and warfare centers as well as other Department of Defense and civilian agency laboratories are also not eligible to receive awards under this BAA and should not directly submit either white papers or full proposals in response to this BAA. If any such organization is interested in one or more of the programs described herein, the organization should contact an appropriate ONR POC to discuss its area of interest. The various scientific divisions of ONR are identified at http://www.onr.navy.mil/. As with FFRDCs, these types of federal organizations may team with other responsible sources from academia and industry that are submitting proposals under this BAA.

Teams are also encouraged and may submit proposals in any and all areas. However, Offerors must be willing to cooperate and exchange software, data and other information in an integrated program with other contractors, as well as with system integrators, selected by ONR.

Some topics cover export controlled technologies. Research in these areas is limited to "U.S. persons" as defined in the International Traffic in Arms Regulations (ITAR) - 22 CFR § 1201.1 et seq.

# IV. APPLICATION AND SUBMISSION INFORMATION

### 1. Application and Submission Process - White Paper, Oral Presentation, Full Proposals

The due date for white papers is no later than 4:00 PM (EST) on Friday, 10 April 2009. White papers received after the published due date will not be considered for funding in FY 2010. Each white paper should state that it is submitted in response to this BAA.

The only acceptable methods for submission of white papers is via the United States Postal Service (USPS) with delivery confirmation, via a commercial carrier (FedEx and UPS) or hand delivered to the attention Ms. Sheila Richardson (Primary) or Dr. Ingham Mack (secondary) at the address provided later in this BAA. NOTE: White Papers sent by fax or e-mail will not be considered.

Evaluation/Notification: Navy evaluations of the white papers will be issued via e-mail notification on or about 28 April 2009. An expanded oral presentation will be subsequently requested from those Offerors whose proposed technologies have been identified as being of "particular value" to the Navy. However, any such request does not assure a subsequent award.

Oral Presentation: The purpose of the Oral Presentation is to better acquaint the Government with the offeror's proposal. Offerors whose white papers are selected for oral presentations will be invited via e-mail to the unclassified oral presentation event which is planned for Thursday, 21 May 2009. A detailed format for the presentation will be provided in the e-mail invitation. Each presentation will be no be no longer than twenty-five (25) minutes in duration. An additional five (5) minutes will be allowed for questions (if any) from the panel of government reviewers.

Evaluation/Notification: Navy evaluations of the oral presentations will be issued via e-mail notification on or about 02 June 2009. A full proposal will be subsequently encouraged from those offerors whose proposed technologies have been identified through the aforementioned e-mail. Any offeror whose oral presentation was not identified as being of "particular value" to the Navy is ineligible to submit a full proposal under the BAA

Full Proposal Submission: Full proposals will not be considered under this BAA unless both a white paper was received by the due date specified above and a presentation was made during the Oral Presentation event and under both, the proposal appeared to be of "particular value" to the Navy.

# 2. Content and Format of White Papers/Full Proposals -

IMPORTANT NOTE: Titles given to the White Papers/Full Proposals should be descriptive of the work they cover and not be merely a copy of the title of this solicitation.

The proposal format and content identified below are applicable to the submission of proposals for contracts. As noted in Paragraph 5 below, proposals selecting grant awards are to be formatted as required by Standard Form 424 (R&R), which is available via the internet at http://www.grants.gov/.

White Papers and Full Proposals submitted under the BAA are expected to be unclassified; however, confidential/classified responses are permitted. If a classified response is submitted, the resultant contract will be unclassified.

# **Unclassified Proposal Instructions:**

Unclassified White Papers and Full Proposals shall be submitted directly to the appropriate Technical Point of Contact (TPOC).

### Classified Proposal Instructions:

Classified White Papers and Full Proposals shall be submitted directly to the attention of ONR's Document Control Unit at the following address:

OUTSIDE EVELOPE (no classification marking):

Office of Naval Research Document Control Unit ONR Code 43 875 North Randolph Street Arlington, VA 22203-1995

The inner wrapper of the classified proposal should be addressed to the attention of Dr. Ingham Mack (), ONR Code 312 and marked in the following manner:

INNER ENVELOPE (stamped with the overall classification of the material)

Program: Electronics Technology

Office of Naval Research Attn: Dr. Ingham Mack

ONR Code: 312

875 North Randolph Street Arlington, VA 22203-1995

An 'unclassified' Statement of Work (SOW) must accompany any classified proposal.

Proposal submissions will be protected from unauthorized disclosure in accordance with FAR Subpart 15.207, applicable law, and DoD/DoN regulations. Offerors are expected to appropriately mark each page of their submission that contains proprietary information. The full proposal shall include a severable, self-standing Statement of Work, which contains only unclassified information and does not include any proprietary restrictions.

<u>IMPORTANT NOTE</u>: Titles given to the White Papers/Full Proposals should be descriptive of the work they cover and not be merely a copy of the title of this solicitation.

The formats and content identified below are applicable to submissions for contracts. As noted in Paragraph 5 below, submissions for grant awards are to be formatted as required by Standard Form 424 (R&R), which is available via the internet at http://www.grants.gov/.

### WHITE PAPERS

# **White Paper Format**

- Paper Size 8.5 x 11 inch paper
- · Margins 1 inch
- Spacing single or double-spaced
- Font Times New Roman, 12 point
- Max. Number of Pages permitted: 7 pages (excluding cover page, resumes, bibliographies, and table of contents)
- Copies one (1) original, five (5) copies, and one (1) electronic copy on CD-Rom (in Microsoft® Word or .PDF format).

## **White Paper Content**

- <u>Cover Page:</u> The Cover Page shall be labeled "WHITE PAPER" and shall include the BAA number, proposed title, technical points of contact, telephone number, facsimile number, and e-mail address.
- **Technical Concept:** A description of the technology innovation and technical risk areas.

The technical section must address the following: Technical objective, Technical approach, Deliverables, Recent technical breakthroughs that will reduce risk, innovation, relevance and transition potential to Navy and the Marine Corps systems, proprietary aspects of the project and any assertions of data rights applicable to the results of this effort.

• **Operational Naval Concept:** A description of the project objectives, the concept of operation for the new capabilities to be delivered, and the expected operational performance improvements.

### **FULL PROPOSALS**

### Full Proposal Format - Volume 1 - Technical and Volume 2 - Cost Proposal

- Paper Size 8.5 x 11 inch paper
- Margins 1 inch
- Spacing single or double-spaced
- Font Times New Roman, 12 point
- Number of Pages The Technical Volume (Vol. 1) shall not exceed more than 25 pages. There
  are no page limitations to the Cost Proposal, Volume 2. The cover page, table of contents,

- personnel resumes, and bibliographies shall not be included in the page limit. Full Proposals exceeding the page limit may not be evaluated.
- Copies one (1) original, five (5) copies, and one (1) electronic copy on CD-Rom (in Microsoft® Word or .PDF format). If a grant is sought, the full proposal shall be submitted electronically on Standard Form 424 (R&R) at http://www.grants.gov/ as delineated below.

# **Full Proposal Content**

### **Volume 1: Technical Proposal**

- Cover Page: This should include the words "Technical Proposal" and the following:
  - 1. BAA number:
  - 2. Title of Proposal;
  - 3. Identity of prime Offeror and complete list of subcontractors, if applicable;
  - 4. Technical contact (name, address, phone/fax, electronic mail address)
  - 5. Administrative/business contact (name, address, phone/fax, electronic mail address) and;
  - 6. Duration of effort
- <u>Table of Contents</u>: An alphabetical/numerical listing of the sections within the proposal, including corresponding page numbers.
- Statement of Work: A Statement of Work (SOW) clearly detailing the scope and objectives of the effort and the technical approach. It is anticipated that the proposed SOW will be incorporated as an attachment to the resultant award instrument. To this end, the proposals must include a severable, self-standing SOW, without any proprietary restrictions, which can be attached to the contract or agreement award. Include a detailed listing of the technical tasks/subtasks organized by year. Limit the number of pages for this section to 4.

Submission of the SOW without restrictive markings is your company's affirmation that the SOW is non-proprietary and releasable in response to Freedom of Information Act (FOIA) requests.

- <u>Technical Approach and Justification:</u> The major portion of the proposal should consist of a clear description of the technical approach being proposed. This discussion should provide the technical foundation / justification for pursuing this particular approach / direction and why one could expect it to enable the objectives of the proposal to be met. Limit the number of pages for this section to 8.
  - Operational Naval Concept: A description of the project objectives, the concept of operation for the new capabilities to be delivered, and the expected operational performance improvements.
- <u>Project Schedule and Milestones:</u> A summary of the schedule of events and milestones. Limit the number of pages for this section to 1.
- Assertion of Data Rights and/or Rights in Computer Software: For a contract award an Offeror may provide with its proposal assertions to restrict use, release or disclosure of data and/or computer software that will be provided in the course of contract performance. The rules governing these assertions are prescribed in Defense Federal Acquisition Regulation Supplement (DFARS) clauses 252.227-7013, -7014 and 7017. These clauses may be accessed at the following web address:

### http://farsite.hill.af.mil/VFDFARA.HTM

The Government may challenge assertions that are provided in improper format or that do not properly acknowledge earlier federal funding of related research by the Offeror. Limit the number of pages for this section to 1.

If it is determined that data rights are not applicable, indicate no assertions are being made in the proposal submission.

- **Deliverables:** A detailed description of the results and products to be delivered inclusive of the timeframe in which they will be delivered. Limit the number of pages for this section to 1.
- Management Approach: A discussion of the overall approach to the management of this effort, including brief discussions of the total organization; use of personnel; project/function/subcontractor/subrecipient relationships; government research interfaces; and planning, scheduling and control practice. Identify which personnel and subcontractors/subrecipients (if any) will be involved. Include a description of the facilities that are required for the proposed effort with a description of any Government Furnished Equipment/Hardware/Software/Information required, by version and/or configuration. Limit the number of pages for this section to 5.
- Current and Pending Project and Proposal Submissions: Offerors are required to provide information on all current and pending support for ongoing projects and proposals, including subsequent funding in the case of continuing contracts, grants, and other assistance agreements. Offerors shall provide the following information of any related proposal submissions from whatever sources (e.g., ONR, Federal, State, local or foreign government agencies, public or private foundations, industrial or other commercial organizations). The information must be provided for all proposals already submitted or submitted concurrently to other possible sponsors, including ONR. Concurrent submission of a proposal to other organizations will not prejudice its review by ONR:
  - 1) Title of Proposal and Summary; 2) Source and amount of funding (annual direct costs; provide contract and/or grant numbers for current contracts/grants); 3) Percentage effort devoted to each project; 4) Identity of prime Offeror and complete list of subcontractors, if applicable; 5) Technical contact (name, address, phone/fax, electronic mail address) 6) Administrative/business contact (name, address, phone/fax, electronic mail address); 7) Duration of effort (differentiate basic effort); 8) The proposed project and all other projects or activities requiring a portion of time of the PI and other senior personnel must be included, even if they receive no salary support from the project(s); 9) The total award amount for the entire award period covered (including Mar 2009 12 indirect costs) must be shown as well as the number of person-months per year to be devoted to the project, regardless of source of support; and 10) State how projects are related to the proposed effort and indicate degree of overlap.
- Qualifications: Qualifications: A discussion of the qualifications of the proposed Principal Investigator and any other key personnel. Include resumes for the Principal Investigator and other key personnel and full curricula vitae for Principal Investigators and consultants. The resumes and curricula vitae shall be attached to the proposal and will not count toward the page limitations. Limit the number of pages for this section to 3.
- Other Requirements: Executive Summary: Summarize the technology you are proposing and the expected improvements to the Navy.Limit the number of pages for this section to 1.

# **VOLUME 2: Cost Proposal**

### **INSTRUCTIONS FOR CONTRACTS**

Although not required and provided for informational purposes only, adhering to the instructions delineated below may expedite contract or assistance award placement. Detailed instructions, entitled "Instructions for Preparing Cost Proposals for Contracts and Agreements", including a sample template for preparing costs proposals for contracts and agreements, may be found at ONR's website listed under the 'Acquisition Department - Contracts & Grants Submitting a Proposal' link at: http://www.onr.navy.mil/02/how\_to.asp

The Cost Proposal shall consist of a cover page and two parts, Part 1 will provide a detailed cost breakdown of all costs by cost category by calendar or Government fiscal year, and Part 2 will provide a cost breakdown by task/sub-task corresponding to the task numbers in the proposed Statement of

Work. Options must be separately priced.

<u>Cover Page:</u> The use of the SF 1411 is optional. The words "Cost Proposal" should appear on the cover page in addition to the following information:

- BAA number
- · Title of Proposal
- Identity of prime Offeror and complete list of subcontractors, if applicable
- Technical contact (name, address, phone/fax, electronic mail address)
- Administrative/business contact (name, address, phone/fax, electronic mail address) and

# **Part 1** - Detailed breakdown of all costs by cost category by calendar or Government fiscal year:

- <u>Direct Labor</u> Individual labor categories or persons, with associated labor hours and unburdened direct labor rates. Provide escalation rates for out years;
- <u>Indirect Costs</u> Fringe Benefits, Overhead, G&A, COM, etc. and their applicable allocation bases. If composite rates are used, provide the calculations used in deriving the composite rates.
- <u>Travel</u> The proposed travel cost should include the following for each trip: the purpose of the
  trip, origin and destination if known, approximate duration, the number of travelers, and the
  estimated cost per trip must be justified based on the organizations historical average cost per
  trip or other reasonable basis for estimation. Such estimates and the resultant costs claimed
  must conform to the applicable Federal cost principles.
- <u>Subcontracts</u> A cost proposal as detailed as the Offeror's cost proposal will be required to be submitted by the subcontractor. The subcontractor's cost proposal can be provided in a sealed envelope with the Offeror's cost proposal or may be sent directly to the Government. Subcontractor proposals must be received and reviewed prior to contract award. The prime contractor should perform and provide a cost/price analysis of each subcontractor's cost proposal.\*
  - \*Note: DoD Federal Acquisition Regulation provision 252.215-7003 (48 CFR §252.215-7003) is incorporated into this solicitation by reference. The offeror is to exclude excessive pass-through charges from subcontractors. The offeror must identify in its proposal the percentage of effort it intends to perform and the percentage to be performed by each of it's proposed subcontractors. If more than 70 percent of the total effort will be formed through subcontractors, the offeror must include the additional information required by the above-cited clause.
- <u>Consultant</u> Provide a breakdown of the consultant's hours, the hourly rate proposed, any other
  proposed consultant costs, a copy of the signed Consulting Agreement or other documentation
  supporting the proposed consultant cost, and a copy of the consultant's proposed statement of
  work if it is not already separately identified in the prime contractor's proposal.
- <u>Materials & Supplies</u> Provide an itemized list of all proposed materials and supplies including quantities, unit prices, proposed vendors (if known), and the basis for the estimate (e.g., quotes, prior purchases, catalog price lists).
- Contractor Acquired Equipment or Facilities Equipment and/or facilities are normally furnished by the Contractor. If acquisition of equipment and/or facilities is proposed, a justification for the purchase of the items must be provided. Provide an itemized list of all equipment and/or facilities costs and the basis for the estimate (e.g., quotes, prior purchases, catalog price lists).
- Other Directs Costs Provide an itemized list of all other proposed other direct costs and the basis for the estimate (e.g., quotes, prior purchases, catalog price lists).
- Options The Base Period of Performance and Option Periods must be priced at the submission of the proposal. Unpriced options will not be included in any resulting contract or agreement.
- <u>Fee/profit</u> ("CONTRACT PROPOSALS ONLY") Profit or fee is not allowed on direct costs for facilities or in cost-sharing contracts.

Note: Indicate if you have an approved Purchasing/Estimating System and/or describe the process used to determine the basis of reasonableness (e.g., competition, market research, best value analysis) for subcontractors, consultants, materials, supplies, equipment/facilities, and other direct costs.

<sup>\*</sup> Note: DoD Federal Acquisition Regulation provision 252.215-7003 (48 CFR § 252.215-7003) is

incorporated into this solicitation by reference. The offeror is to exclude excessive pass-through charges from subcontractors. The offeror must identify in its proposal the percentage of effort it intends to perform and the percentage to be performed by each of its proposed subcontractors. If more than 70 percent of the total effort will be performed through subcontracts, the offeror must include the additional information required by the above-cited clause.

<u>Part 2</u> Cost breakdown by task/sub-task corresponding to the same task breakdown in the proposed Statement of Work. When options are contemplated, options must be separately identified and priced by task/subtask.

# **INSTRUCTIONS FOR GRANTS**

The offeror must use the Grants.Gov forms from the application package template associated with the BAA on the Grants.Gov web site located at http://www.grants.gov/ . Elements of the budget should include:

- <u>Direct Labor</u> Individual labor categories or persons, with associated labor hours and unburdened direct labor rates or percentage of effort or total man-years. Provide escalation rates for out years. Justify in Field K
- <u>Indirect Costs</u> Fringe Benefits, Overhead, F&A, G&A etc. and their applicable allocation bases.
   If composite rates are used, provide the calculations used in deriving the composite rates. Justify in Field K
- <u>Travel</u> The proposed travel cost should include the following for each trip: the purpose of the
  trip, origin and destination if known, approximate duration, the number of travelers, and the
  estimated cost per trip must be justified based on the organizations historical average cost per
  trip or other reasonable basis for estimation. Such estimates and the resultant costs claimed
  must conform to the applicable Federal cost principles.
- <u>Subawards</u> Cost proposal as detailed as the recipient's cost proposal will be required to be submitted by the subrecipient. The subawardee's or sub recipient's cost proposal can be provided in a sealed envelope with the recipient's cost proposal or may be sent directly to the Government. Subawardee's proposals must be received and reviewed prior to award.
- Consultants Provide a breakdown of the consultant's hours, the hourly rate proposed, any other
  proposed consultant costs and a copy of the consultant's proposed statement of work if it is not
  already separately identified in the prime recipient's proposal. Strong justification must be
  provided, and consultants are to be used only under exceptional circumstances where no
  equivalent expertise can be found at a participating university. Justify in Field K.
- <u>Materials & Supplies</u> Provide an itemized list of all proposed materials and supplies including quantities, unit prices, proposed vendors (if known), and the basis for the estimate (e.g., quotes, prior purchases, catalog price lists). Justify in Field K.
- Recipient Acquired Equipment or Facilities Equipment and/or facilities are normally furnished by the Recipient. If acquisition of equipment and/or facilities is proposed, a justification for the purchase of the items must be provided. Provide an itemized list of all equipment and/or facilities costs and the basis for the estimate (e.g., quotes, prior purchases, catalog price lists). For computer/laptop purchases include a statement indicating the computer/laptop will be integrated into the program or used as an integral part of the research effort. Justify in Field K.
- Other Direct Costs Provide an itemized list of all other proposed other direct costs such as
  Graduate Assistant tuition, laboratory fees, report and publication costs, and the basis for the
  estimates (e.g., quotes, prior purchases, catalog price lists). Justify in Field K.
  NOTE: If the grant proposal is for a conference, workshop, or symposium, the proposal should
  include the following statement: "The funds provided by ONR will not be used for food or
  beverages."
- Options The Base Period of Performance and Option Periods must be priced at the submission of the proposal. Unpriced options will not be included in any resulting award or agreement.
- Fee/Profit Fee/profit is unallowable.

# 3. Significant Dates and Times -

Event	Date	Time

White Paper Due Date	4/10/2009	4:00 PM Eastern Daylight Time
Notification of White Paper Evaluation*	4/28/2009	
Oral Presentations*	5/21/2009	
Notification of Oral Presentation Evaluation*	6/2/2009	
Full Proposal Due Date	6/26/2009	4:00 PM Eastern Daylight Time
Notification of Selection: Full Proposals*	7/10/2009	
Awards*	10/30/2009	

<sup>\*</sup>These dates are estimates as of the date of this announcement.

**NOTE:** Due to changes in security procedures since September 11, 2001, the time required for hard-copy written materials to be received at the Office of Naval Research has increased. Materials submitted through the U.S. Postal Service, for example, may take seven days or more to be received, even when sent by Express Mail. Thus any hard-copy proposal should be submitted long enough before the deadline established in the solicitation so that it will not be received late and thus be ineligible for award consideration.

# 4. Submission of Late Proposals -

Any proposal, modification, or revision that is received at the designated Government office after the exact time specified for receipt of proposals is "late" and will not be considered unless it is received before award is made, the contracting officer determines that accepting the late proposal would not unduly delay the acquisition and:

- If it was transmitted through an electronic commerce method authorized by the announcement, it was received at the initial point of entry to the Government infrastructure not later than 5:00 P.M. one working day prior to the date specified for receipt of proposals; or
- There is acceptable evidence to establish that it was received at the Government installation designated for receipt of proposals and was under the Government's control prior to the time set for receipt of proposals; or
- It was the only proposal received.

However, a late modification of an otherwise timely and successful proposal that makes its terms more favorable to the Government will be considered at any time it is received and may be accepted.

Acceptable evidence to establish the time or receipt at the Government installation includes the time/date stamp of that installation on the proposal wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.

If an emergency or unanticipated event interrupts normal Government processes so that proposals cannot be received at the Government office designated for receipt of proposals by the exact time specified in the announcement, and urgent Government requirements preclude amendment of the announcement closing date, the time specified for receipt of proposals will be deemed to be extended to the same time of day specified in the announcement on the first work day on which normal Government processes resume.

The contracting officer must promptly notify any offeror if its proposal, modifications, or revision was received late and must inform the offeror whether its proposal will be considered.

# 5. Submission of Grant Proposals through Grants.gov

(NOT APPLICABLE TO PROPOSALS FOR CONTRACTS)

Detailed instructions entitled "Grants.Gov Electronic Application and Submission Information" on how to submit a grant proposal through Grants.gov may be found at the ONR website listed under the 'Acquisition Department - Contracts & Grants Submitting a Proposal' link at: http://www.onr.navy.mil/02/how to.asp

Grant proposals shall be submitted through Grants.Gov using the Grants.gov forms from the application package template associated with the BAA on the Grants.Gov website. To be considered for award, applicants must include the ONR Department Code 312 in Block 4 entitled 'Federal Identifier' of the Standard Form (SF) 424 R&R.

White Papers should not be submitted through the Grants.gov Apply process but rather should be sent directly to ONR. White Papers should be submitted in accordance with section IV. APPLICATION AND SUBMISSION INFORMATION.

By completing Blocks 18 and 19 the Grant Applicant is providing the certification on lobbying required by 32 CFR Part 28. Refer to Section VI, 'Award Administration Information' entitled "Certifications" for further information.

For electronic submission of grant full proposals, several one-time actions must be completed in order to submit an application through Grants.gov. These include obtaining a Dun and Bradstreet Data Universal Numbering System (DUNS) number, registering with the Central Contract Registration (CCR), registering with the credential provider, and registering with Grants.gov. See www.grants.gov, specifically www.grants.gov/GetStarted.

Use the Grants.gov Organization Registration Checklist at

http://www.grants.gov/applicants/register\_your\_organization.jsp which will provide guidance through the process. Designating an E-Business Point of Contact (EBiz POC) and obtaining a special password called 'MPIN' are important steps in the CCR registration process. Applicants who are not registered with CCR and Grants.gov should allow at least 21 days to complete these requirements. The process should be started as soon as possible. Any questions relating to the registration process, system requirements, how an application form works, or the submittal process must be directed to Grants.gov at 1-800-518-4726 or support@grants.gov.

Special Notices Relative to Grant Applications to be submitted through Grants.Gov:

All attachments to grant applications submitted through Grants.Gov must be in Adobe Portable Document Format (i.e., .PDF files). Proposals with attachments submitted in word processing, spreadsheet, or any format other than Adobe Portable Document Format will not be considered for award.

Process to Obtain a Waiver from the Use of Grants.Gov for Submission of Full Grant Proposals: If a prospective grantee is unable to comply with the requirement to use Grants.Gov "APPLY" for submission of a grant application under this BAA or finds it would be an excessive burden to comply with this requirement, a waiver request may be submitted not less than 30 calendar days prior to the closing date for receipt of Full Proposals. Such request should be submitted by the Electronic Business Point of Contact listed in the CCR for the organization and should contain the Organization/Individual's name, address, telephone number, and email address. The request should state the reason for the request in sufficient detail so a decision can be made. The Waiver Request should be submitted to the ONR Acquisition Department point of contact or Grants Officer listed in the BAA. Such request can be sent by registered mail or email. The "postmark" stamp on the envelope or the time annotated on the email will be used to determine timeliness of the request. A decision and response will be issued within 14 calendar days of receipt of the request by ONR. Foreign Grantees who are not registered in CCR may request a waiver on that basis since CCR registration is integral to the Grants.Gov application process.

# 6. Address for the Submission of White Papers and Full Proposals.

Full Proposals for Contracts should be sent to the Office of Naval Research at the following address:

White Paper Submission	Full Proposal Submission
Hard Copy & Electronic	Hard Copy & Electronic

Copies - one (1) original, five (5) hard copies and one electronic copy on a CD-ROM (in Microsoft® Word or Excel 2003 compatible or .PDF format).

Electronic documents must be provided on a CD-ROM that is sent with the hard copy. NOTE: White papers and full proposals sent by FAX or e-mail will NOT be considered.

The only acceptable methods for submission of white papers is via the United States Postal Service (USPS) with delivery confirmation, via a commercial carrier (e.g., FedEx, United Parcel Service (UPS))or hand delivered to the attention of the Ms. Sheila Richardson or Dr. Ingham Mack at the addresses located below:

Hard copies of white papers and full proposals for Contracts should be sent to the Office of Naval Research at the following address:

Primary Contact	Secondary Contact
Office of Naval Research	Office of Naval Research
Attn*: Ms. Sheila Richardson	Attn*: Dr. Ingham Mack
ONR Department Code: 312	ONR Department Code: 312
875 North Randolph Street	875 North Randolph Street
Arlington, VA 22203-1995	Arlington, VA 22203-1995

#### V. EVALUATION INFORMATION

### 1. Evaluation Criteria -

Award decisions will be based on a competitive selection of proposals resulting from a scientific and cost review. Evaluations will be conducted using the following evaluation criteria:

- 1. Overall scientific and technical merits of the proposal;
  - a. The degree of innovation
  - b. The soundness of technical concept
  - c. The offeror's awareness of the state of the art and understanding of the scope of the problem, technical risk, and the technical effort needed to address the problem.
- 2. Naval relevance, transition potential and anticipated contributions of the proposed technology
- 3. Offeror's capabilities, related experience, and past performance, including the qualifications, capabilities and experience of the proposed principal personnel
  - a. The quality of the technical personnel proposed
  - b. The offeror's experience in relevant efforts with similar resources
  - c. The ability to manage the proposed effort
- 4. The qualifications, capabilities and experience of the proposed Principal Investigator (PI), team leader and key personnel who are critical in achieving the proposal objectives; and
- 5. The realism of the proposed costs and availability of funds.

The submissions receiving awards will be selected through a technical/scientific/cost decision process with technical and scientific considerations being more important than cost. Even though cost is of less importance than all the technical factors combined, it will not be ignored. The degree of its importance will increase with the degree of equality of the proposals in relation to the other factors on which selection is to be based, or when the cost is so significantly high as to diminish the value of the technical superiority to the Government. Criteria (1-4) are listed in descending order of priority. Any sub-criteria listed under a particular criterion are of equal importance to each other.

For proposed awards to be made as contracts to other than small businesses, the socio-economic merits of each proposal will be evaluated based on the extent of the Offeror's commitment in providing meaningful subcontracting opportunities for small businesses, small disadvantaged businesses, woman-owned small businesses, HUBZone small businesses, veteran-owned small businesses, service disabled veteran-owned small businesses, historically black colleges and universities, and minority institutions.

The Government will evaluate options for award purposes by adding the total cost for all options to the total cost for the basic requirement. Evaluation of options will not obligate the Government to exercise the options during contract performance.

### 2. Evaluation Panel -

Technical and cost proposals submitted under this BAA will be protected from unauthorized disclosure in accordance with FAR 3.104-4 and 15.207. The cognizant Program Officer and other Government scientific experts will perform the evaluation of technical proposals. Cost proposals will be evaluated by Government business professionals. Restrictive notices notwithstanding, one or more support contractors may be utilized as subject-matter-expert technical consultants. Similarly, support contractors may be utilized to evaluate cost proposals. However, proposal selection and award decisions are solely the responsibility of Government personnel. Each support contractor's employee having access to technical and cost proposals submitted in response to this BAA will be required to sign a non-disclosure statement prior to receipt of any proposal submissions.

### VI. AWARD ADMINISTRATION INFORMATION

# 1. Administrative Requirements -

- The North American Industry Classification System (NAICS) code The North American Industry Classification System (NAICS) code for this announcement is "541712" with a small business size standard of "500 employees".
- Central Contractor Registry (CCR) Successful Offerors not already registered in the CCR will be required to register in CCR prior to award of any grant, contract, cooperative agreement, or other transaction agreement. Information on CCR registration is available at http://www.onr.navy.mil/02/ccr.htm.
- Subcontracting Plans Successful contract proposals that exceed \$550,000, submitted by all but small business concerns, will be required to submit prior to award a Small Business Subcontracting Plan in accordance with FAR 52.219-9.
- Certifications Proposals for contracts and assistance agreements should be accompanied by a completed certification package.

### **Contracts**

For contracts, in accordance with FAR 4.1201, prospective contractors shall complete and submit electronic annual representations and certifications at http://orca.bpn.gov. In addition to completing the Online Representations and Certifications Application (ORCA), proposals must be accompanied with a completed DFARS and contract specific representations and certifications. These "DFARS and Contract Specific Representations and Certifications", i.e., Section K, may be accessed under the Contracts and Grants Section of the ONR Home Page at http://www.onr.navy.mil/02/rep\_cert.asp.

#### Grants

Grant and Cooperative Agreement awards greater than \$100,000 require a certification of compliance with a national policy mandate concerning lobbying. Grant applicants shall provide this certification by electronic submission of SF424 (R&R) as a part of the electronic proposal submitted via Grants.gov (complete Blocks 18 and 19); The following certification applies to each applicant seeking federal assistance funds exceeding \$100,000:

#### CERTIFICATION REGARDING LOBBYING ACTIVITIES

- (1) No Federal appropriated funds have been paid or will be paid by or on behalf of the applicant, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the Federal contract, grant, loan, or cooperative agreement, the applicant shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The applicant shall require that the language of this certification be included in the award documents for all sub awards at all tiers (including sub contracts, sub grants, and contracts under grants, loans, and cooperative agreements) and that all sub recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S.C. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

## Grants and Cooperative Agreements not through Grants.gov:

Proposers seeking grants or cooperative agreements who have received Grants.gov waiver approval for awards greater than \$100,000 shall complete and submit electronic representations and certifications at the Contracts and Grants Section of the ONR Home Page at http://www.onr.navv.mil/02/rep\_cert.asp.

## 2. Reporting -

The following are sample data deliverables that are typically required under a research effort:

- Technical and Financial Progress Reports
- Presentation Materials
- -Other Documentation or Reports, as Required
- Final Report

Additional data deliverables may be proposed and finalized during negotiations. Research performed under contracts may also include the delivery of software, prototypes, and other hardware deliverables.

#### VII. OTHER INFORMATION

### 1. Government Property/Government Furnished Equipment (GFE) and Facilities

Each proposer must provide a very specific description of any equipment/hardware that it needs to acquire to perform the work. This description should indicate whether or not each particular piece of equipment/hardware will be included as part of a deliverable item under the resulting award. Also, this description should identify the component, nomenclature, and configuration of the equipment/hardware that it proposes to purchase for this effort. The purchase on a direct reimbursement basis of special test equipment or other equipment that is not included in a deliverable item will be evaluated for allowability on a case-by-case basis. Maximum use of Government integration, test, and experiment facilities is encouraged in each of the Offeror's proposals.

Offerors are expected to provide all facilities (equipment and/or real property) necessary for the performance of the proposed effort. Any direct charge of facilities, not including deliverable items, must be specifically identified in the Offeror's proposal and approved by the Government prior to purchase. In addition, any request to use Government owned facilities must be included in the Offeror's proposal and approved in advance by the cognizant Government official. (Note: proposals that are contingent upon ONR providing government furnished equipment, instrumentation, test facilities, or threat hardware and information for exploitation are NOT acceptable.)

## 2. Security Classification

In order to facilitate intra-program collaboration and technology transfer, the Government will attempt to enable technology developers to work at the unclassified level to the maximum extent possible. If access to classified material will be required at any point during performance, the Offeror must clearly identify such need prominently in its proposal.

### 3. Use of Animals and Human Subjects in Research

If animals are to be utilized in the research effort proposed, the Offeror must complete a DOD Animal Use Protocol with supporting documentation (copies of AALAC accreditation and/or NIH assurance, IACUC approval, research literature database searches, and the two most recent USDA inspection reports) prior to award. For assistance with submission of animal research related documentation, contact the ONR Animal/Human Use Administrator at (703) 696-4046.

Similarly, for any proposal for research involving human subjects the Offeror must submit prior to award: documentation of approval from an Institutional Review Board (IRB); IRB-approved research protocol; IRB-approved informed consent form; proof of completed human research training (e.g., training certificate or institutional verification of training); an application for a DoD Navy Addendum to the Offeror's DHHS-issued Federalwide Assurance (FWA) or the Offeror's DoD Navy Addendum number. In the event that an exemption criterion under 32 CFR.219.101(b) is claimed, provide documentation of the determination by the Institutional Review Board (IRB) Chair, IRB Vice Chair, designated IRB administrator or official of the human research protection program. Information about assurance applications and forms can be obtained by contacting ONR\_343\_contact@navy.mil. If the research is determined by the IRB to be greater than minimal risk, the Offeror also must provide the name and contact information for the independent medical monitor. [Note: for research involving human subjects that is greater than minimal risk, administrative procedures to protect human subjects from medical expenses (not otherwise provided or reimbursed) that are the direct result of participation in a research project must be addressed. Additional supporting documentation may be requested. For additional information on this topic, email ONR 343 contact@navv.mil.] For assistance with submission of human subject research related documentation, contact the ONR Animal/Human Use Administrator at (703) 696-4046.

# 4. Recombinant DNA

Reserved

# 5. Department of Defense High Performance Computing Program

The DoD High Performance Computing Program (HPCMP) furnishes the DoD S&T and RDT&E communities with use-access to very powerful high performance computing systems. Awardees of ONR contracts, grants, and assistance instruments may be eligible to use HPCMP assets in support of their funded activities if ONR Program Officer approval is obtained and if security/screening requirements are favorably completed. Additional information and an application may be found at http://www.hpcmo.hpc.mil/.

## 6. Protection of Proprietary and Sensitive Information

The parties acknowledge that, during performance of the contract, grant, or other assistance agreement resulting from this BAA, the recipient may require access to certain proprietary and confidential information (whether in its original or derived form) submitted to or produced by the Government. Such information includes, but is not limited to, business practices, proposals, designs, mission or operation concepts, sketches, management policies, cost and operating expense, technical data and trade secrets, proposed Navy budgetary information, and acquisition planning or acquisition actions, obtained either directly or indirectly as a result of the effort performed on behalf of ONR. The recipient shall take appropriate steps not only to safeguard such information, but also to prevent disclosure of such information to any party other than the Government. The recipient agrees to indoctrinate company personnel who will have access to or custody of the information concerning the nature of the confidential terms under which the Government received such information and shall stress that the information shall not be disclosed to any other party or to recipient personnel who do not need to know the contents thereof for the performance of the contract/agreement. Recipient personnel shall also be informed that they shall not engage in any other action, venture, or employment wherein this information will be used for any purpose by any other party.

## 7. Project Meetings and Reviews

Individual program reviews between the ONR sponsor and the performer may be held as necessary. Program status reviews may also be held to provide a forum for reviews of the latest results from experiments and any other incremental progress towards the major demonstrations. These meetings will be held at various sites throughout the country. For costing purposes, offerors should assume that 40% of these meetings will be at or near ONR, Arlington VA and 60% at other contractor or government facilities. Interim meetings are likely, but these will be accomplished via video telephone conferences, telephone conferences, or via web-based collaboration tools.

#### 8. Submission of Questions

Any questions regarding this solicitation must be provided to the Science and Technology Point of Contact and/or Business Point of Contact listed in this solicitation. All questions shall be submitted in writing by electronic mail.

Questions regarding **white papers** must be submitted by **4:00 PM Eastern Time** on **27 March 2009**. Questions after this date and time may not be answered, and the due date for submission of the white papers will not be extended.

Questions regarding **full proposals** must be submitted by **4:00 PM Eastern Time** on **12 June 2009**. Questions after this date and time may not be answered, and the due date for submission of the proposals will not be extended.

Answers to questions submitted in response to this BAA will be addressed in the form of an Amendment and will be posted to one or more of the following webpages:

- Federal Business Opportunities (FEDBIZOPPS) Webpage https://www.fbo.gov/
- Grants.gov Webpage http://www.grants.gov/
- ONR Broad Agency Announcement (BAA) Webpage http://www.onr.navy.mil/02/baa/

### 9. Other Guidance, Instructions, and Information

Options: Responses to this BAA that include options are not encouraged. Each multi-year program should be structured such that the annual progress toward the stated program goals and milestones can be determined by the ONR Program Officer.

Responses: All responses are to be unclassified and submitted by the given due dates